



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:

ALEXANDER O. GOUSHCHA, ET AL.

Application No.: 10/606,053

Filed: June 25, 2003

For: **ULTRA THIN BACK-ILLUMINATED  
PHOTODIODE ARRAY STRUCTURES  
AND FABRICATION METHODS**

Art Group: 2812

Examiner:

**INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.97**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure, enclosed is a copy of Information Disclosure Statement by Applicant (form PTO/SB/08), which is being submitted before the mailing of a first Office Action. It is respectfully requested that the cited references be considered and that the enclosed copy of PTO/SB/08 be initialed by the Examiner to indicate such consideration and a copy thereof returned to applicant(s). Copies of the references cited on PTO/SB/08 are enclosed herewith.

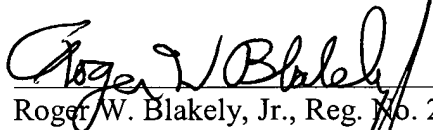
The submission of this Information Disclosure Statement is not to be construed as a representation that a search has been made in the subject application and is not to be construed as an admission that the information cited in this statement is material to patentability.

Please charge any fees due to Deposit Account 02-2666. A duplicate copy of the Fee Transmittal (PTO/SB/17) is enclosed for this purpose.

Respectfully submitted,


BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: November 05, 2003

  
\_\_\_\_\_  
Roger W. Blakely, Jr., Reg. No. 25,831

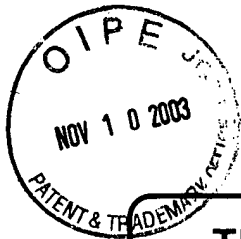
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\_\_\_\_\_  
Jessica A. Clark

11-05-03

Date



# TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application No.	10/606,053
Filing Date	June 25, 2003
First Named Inventor	Alexander O. Goushcha
Art Unit	2812
Examiner Name	
Total Number of Pages in This Submission	118
Attorney Docket Number	2712P009

## ENCLOSURES (check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Response <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input checked="" type="checkbox"/> PTO/SB/08 <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Basic Filing Fee <input type="checkbox"/> Declaration/POA <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s)	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): <div>Copies of 13 Cited References</div>
Remarks		

## SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Roger W. Blakely, Jr., Reg. No. 25,831 BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP
Signature	
Date	November 5, 2003

## CERTIFICATE OF MAILING/TRANSMISSION

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Typed or printed name	Jessica A. Clark	Date	November 5, 2003
Signature			



# FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27.

TOTAL AMOUNT OF PAYMENT

(\$)

## Complete if Known

Application Number	10/606,053
Filing Date	June 25, 2003
First Named Inventor	Alexander O. Goushcha
Examiner Name	
Group/Art Unit	2812
Attorney Docket No.	2712P009

## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☒ None  
☐ Deposit Account

Deposit  
Account  
Number

02-2666

Deposit  
Account  
Name

Blakely, Sokoloff, Taylor & Zafman LLP

The Commissioner is authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Credit any overpayments  
☐ Charge any additional fee(s) required under 37 CFR §§ 1.16, 1.17, 1.18 and 1.20.  
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1)					(\$)

### 2. EXTRA CLAIM FEES

Total Claims  - 20\*\* =  X  =   
Independent Claims  3 =  X  =   
Multiple Dependent  =

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple Dependent claim, if not paid
1204	86	2204	43	**Reissue independent claims over original patent
1205	18	2205	9	**Reissue claims in excess of 20 and over original patent
SUBTOTAL (2)				

\*\*or number previously paid, if greater, For Reissues, see below

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
2053	130	2053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for ex parte reexamination	
1804	920 *	1804	920 *	Requesting publication of SIR prior to Examiner action	
1805	1,840 *	1805	1,840 *	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	1,210	2255	605	Extension for reply within fifth month	
1404	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	2451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	2460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	1809	385	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	
Other fee (specify)					
SUBTOTAL (3)					(\$)

\* Reduced by Basic Filing Fee Paid

## SUBMITTED BY

## Complete (if applicable)

Name (Print/Type)	Roger W. Blakely, Jr.	Registration No. (Attorney/Agent)	25,831	Telephone	(714) 557-3800
Signature		Date	11/05/03		



Substitute/PAID 449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

Sheet

1

of

2

**Complete if Known**

Application Number	10/606,053
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Examiner Name	
Attorney Docket Number	2712P009

**NON PATENT LITERATURE DOCUMENTS**

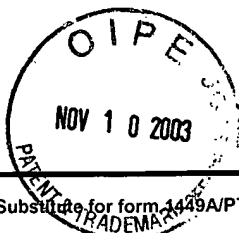
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		DERENZO, STEPHEN E., "Initial Characterization of a BGO-Photodiode Detector for High Resolution Positron Emission Tomography", February 1984, IEEE Transactions on Nuclear Science, Vol. NS-31, No. 1, Pgs 620-626	
		TAKAHASHI, TETSUHIKO et al., "Design of Integrated Radiation Detectors with a-Si Photodiodes on Ceramic Scintillators for use in X-Ray Computed Tomography", June 1990, IEEE Transactions on Nuclear Science, Vol. 37, No. 3, Pgs 1478-1482	
		BURNS, H. N. "BUCK" et al., "Compact, 625-channel scannerless imaging laser radar receiver", 1996, Proc. SPIE, Vol. 2748, Pgs 39-46	
		IWANCZYK, J.S. et al., "Simulation and modelling of a new silicon X-ray drift detector design for synchrotron radiation applications", 1996, Nuclear Instruments and Methods in Physics Research, Section A, Vol. 380, Pgs 288-294	
		KWA, TOMMY A. et al., "Backside-Illuminated Silicon Photodiode Array for an Integrated Spectrometer", May 1997, IEEE Transactions on Electron Devices, Vol. 44, No. 5, Pgs 761-765	
		HOLLAND, S.E. et al., "Development of Low Noise, Back-Side Illuminated Silicon Photodiode Arrays", June 1997, IEEE Transactions on Nuclear Science, Vol. 44, No. 3, Pgs 443-447	
		PATT, B.E. et al., "High Resolution CsI(Tl)/Si-PIN Detector Development for Breast Imaging", August 1998, IEEE Transactions on Nuclear Science, Vol. 45, No. 4, Pgs 2126-2131	

Examiner Signature	Date Considered
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\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

<sup>1</sup>Applicant's unique citation designation number. <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

Based on PTO/SB/08B (08-03) as modified by Blakely, Solokoff, Taylor & Zafman (wlr) 08/11/2003.  
Send To: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450



Substitute for form 449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT****Complete if Known**

Application Number	10/606,053
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Art Unit	2812
Examiner Name	
Attorney Docket Number	2712P009

Sheet 2 of 2

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		VISHAY SEMICONDUCTORS S268P Data Sheet, "Silicon PIN Photodiode Array", May 20, 1999, Document No. 81538, Pgs 1-5	
		DETECTION TECHNOLOGY, INC., "New Photodiode Array Products for Computer Tomography-Detectors", News Bulletin for the Customers and Cooperation Partners, Winter 2000-2001	
		PATT, B.E. et al., "Fast-Timing Silicon Photodetectors", June 2000, IEEE Transactions on Nuclear Science, Vol. 47, No. 3, Pgs 957-964	
		HAMAMATSU PHOTONICS K.K., SOLID STATE DIVISION, "Si Photodiode Catalog", February 2002, Pgs 1-25	
		TORNAI, MARTIN P. et al., "A novel silicon array designed for intraoperative charged particle imaging", November 2002, Medical Physics, Vol. 29, No. 11, Pgs 2529-2540	
		LUHTA, RANDY et al., "Back Illuminated Photodiodes for Multislice CT", February 15-20, 2003, San Diego, California USA	

Examiner Signature	Date Considered
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